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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,059	02/06/2004	Long-Hui Lin	LKSP0032USA	2058

27765 7590 07/20/2005

NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)  
P.O. BOX 506  
MERRIFIELD, VA 22116

EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
2125	

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/708,059

**Applicant(s)**

LIN ET AL.

**Examiner**

Sheela Rao

**Art Unit**

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,9,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,9,11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. Applicant's amendment filed on 13 May 2005 has been entered and considered.
2. Of the originally filed claims 1-12, claims 1, 6, 7, and 9 have been amended; claims 2, 3, 8, and 10 have been cancelled. Claims 1, 4-7, 9, and 11-12 are pending and presented for examination.

### *Response to Amendment*

3. Applicant is advised to review the submitted amendments to claim 1, in particular. The claim has been amended by adding (a), (b), (c), (d), and (e) to the limitations. However, the tabs have not been underlined to be added as an amendment. In order for the tabs to be entered, the new text must be underlined to comply with the amendment rules. Appropriate correction is required.
4. The rejection of claims 1-12 under 35 USC §102(b) as being anticipated by Steffan et al. (USPN 6,512,842 B1) is **withdrawn** in light of the amendments.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-7, 9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steffan et al., US Patent No. 6,512,842 B1.

The patented reference of prior art to Steffan et al. teaches of a method and apparatus for the analysis of defects in a semiconductor wafers. In doing so, a production lot of wafers are scanned and analyzed in an analysis tool, such as the SEM (scanning electron microscope), optical tools, or the FIB (fixed ion beam). The analyzed data is then stored in the defect management system, along with images

of the wafers and assigned descriptors. Furthermore, a review station is present which assigns refined descriptive labels to the images and this data is saved in the database. In addition to the defect inspection process, the ADC (automatic defect classification) protocol is used for classifying the types of defects. As per the limitations of the instant claims, a manual inspection is also taught by the prior art of record. As stated in col. 4: ll.50-59, an operator is able to review the images at the review station and compare those reviewed to other images in the database. Upon having reviewed the retrieved images, the operator can revise the descriptors to refine the database.

Steffan et al. fail to teach the provision of a second wafer and inspection for defects of such as per the limitations of the instant claims. The processing and inspecting of multiple wafers in a semiconductor manufacturing environment is well known. The repeated inspection of wafers for defects enables a greater level of accuracy and minimizes the number of defects. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have analyzed additional wafers using the method as disclosed by Steffan et al. so as to establish a more detailed sampling of defects for the database and increased reliability of the information within the database.

For the reasons stated above, the limitations of the claimed invention is taught by the prior arts of record; thereby, rendering the instant claims unpatentable.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 4-7, 9, and 11-12 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hsu et al.          USPN 6,643,006 B1

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2125

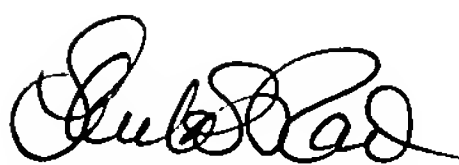
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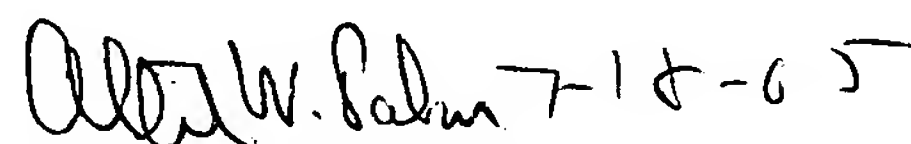
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. The fax number for the organization where this application or any proceeding papers is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. It should be noted that status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sheela S. Rao  
July 13, 2005

  
ALBERT W. PALADINI  
PRIMARY EXAMINER